

MPR30-IEM User Manual

High performance

True diversity

Receiver

SN: _____

Rev. 01 (rif. FW v0.2)

Date: 26 June 2013



BRIEF DESCRIPTION

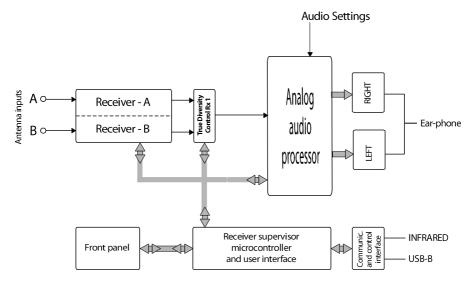
MPR30 is a compact true diversity receiver designed for professional in-ear monitoring applications. This receiver features a real TRUE DIVERSITY configuration along with a unique wideband tuning range up to 232 MHz. Audio processing can be **Stereo MPX** or **mono** based.

The output audio stage is especially design to have maximum audio peak-dynamic of 200 mWatt.

MPR30-IEM is designed to be:

- "easy & quick to use" thanks to
 - o automatic setup functions (i.e. frequencies, scan for best channels),
 - remote configuration utilities (thru infrared or micro-USB interface) using
 Wisycom ENG RX Manager application
 - O OLED display with intuitive context menu navigation
- "extremely flexible", with an incredible frequency agility up to 232MHz
 - o MPR30-IEM-N: 470/700 MHz (TV ch 21/49)
 - o MPR30-IEM-M:566/798 MHz (TV ch 33/61)
- "best in class performances", thanks to the latest Wisycom technology the unit has extreme RF sensitivity and immunity and superb audio quality
- "a durable & upgradable investment", thanks to the very robust design (aluminium housing) and the possibility to upgrade/enhance units performances.

Above a schematic with an overview of main receiver functions.



SAFETY INSTRUCTION

- Read this safety instruction and the manual first
- Follow all instructions and information.
- Do not lose this manual.
- Do not use this apparatus under the rain or near the water.
- Do not install the apparatus near heaters or in hot environments, do not use outside the operating temperature range.
- Do not open the apparatus, only qualified service technician are enabled to operate on it.
 The apparatus needs servicing when it is not properly working or is damaged by liquids, moisture or other objects are fallen in the apparatus.
- Use only accessories or replacement parts authorized or specified by the manufacturer.
- Clean the apparatus only with dry cloths, do not use liquids.
- Report the serial number and the purchasing date in front of the manual. It is needed to have proper replacement parts or accessories from the manufacturer.
- When replacement parts are needed, use only replacement parts authorized from the manufacturer. Substitution with not authorized parts could result in electric shock, hazards or fire.
- Keep attention on all the labels with warnings or hazards on the apparatus.

WARNING: The apparatus is intended for professional use; anyway the manufacturer alerts the user that the headphone output power of the apparatus could exceed the level of 85 dB(A) of sound pressure level and this could be dangerous for the hearings. Do not use the headphone with high power level or for long time. Reduce the power or suspend the hearing in case of any kind of hearing problem.

BATTERIES



MPR30-IEM works with standard camera battery:

- 2xIEC-LR6 1.5 size-AA alkaline or NiMh rechargeable
- KLIC 8000 (lithium-ion, rechargeable)
- Ricoh DB-50 (lithium-ion, rechargeable)
- DR9708 Duracell (lithium-ion, rechargeable)



Battery status can be checked on OLED display or looking the status of LED indicator ON.

Charging can be done with

A. dedicated charger



B. thru the integrated micro-usb-B connector



For B item, the charging status can be checked looking the status of LED indicator ON.

WARNING: The receiver can be used also during the batteries charging with lithium rechargeable batteries inside.

Don't use the receiver without batteries . The receiver powered thru micro-USB without batteries doesn't work correctly.

WARNING: DO NOT operate the device with some new and some old batteries. Always replace ALL BATTERIES.

WARNING: Remember to remove the batteries when the device is not in use.

PRODUCT OVERVIEW

Upper Panel



SMA antenna Connector A and B

MPR30-IEM is supplied with a couple of antennas. According to the working band, different antenna models can be supply. All the models have black cap and a black label with code in white colour.

Antenna Code label



Headphone Output

The audio headphone output with 3.5 mm stereo jack socket lockable (TRS). Audio level can be adjusted with the Volume control knob and the <u>Audio settings> Pwr. Limit menu.</u>

Maximum output power: $2x150mW @ 32\Omega$, $2x200mW@16\Omega$ Pin Assignment:Tip = left (hot), Ring = right (hot), Sleeve = Gnd

For more details see the section Accessories and Parts

On/Off/Volume control

The control knob in the upper panel allows:

- To switch the receiver ON: turn the control knob volume control clockwise until it clicks
- To switch the receiver OFF: turn the control knob volume control counter clockwise until it clicks
- > To adjust the volume: turn the control knob *volume control* until the volume set has the desired level.

Front panel

MPR30-IEM allows an easy and quick configuration using buttons, RGB LED's and an OLED display.



OLED Display

The receiver has a high contrast display. Pushing one of the 4 buttons while the receiver is active (but the display is off), turn on automatically the display. After a time-out user setting (see <u>Display>Off timeout menu</u>) the display turns off automatically.

SEL & EXIT Buttons

Push the 2 buttons together to enter on the function menu

SEL Button

Push this button to navigate function menu's and keep pushing to save the chosen setup

EXIT Button

Push this button to turn off the display.

During menu navigation push this button to exit from current menu (escape function).

SYNC/UP Button

Push and keep this button to start a synchronisation with a Wisycom transmitter (follow instructions on display). Before starting synchronization IRDA must be enabled on Wisycom transmitter.

During menu navigation push this button to move -up and select the previous item.

SCAN/DOWN Button

Push and keep this button to start the automatic scan.

During menu navigation push this button to move-down and select the previous item

ON & RF Led Indicators (Firmware rel. v0.2)

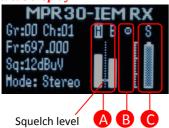
	ON	RF	WHEN	MEANING
dn .	red	off	when the receiver is power on, during the power up phase	the receiver is not ready to use, wait the status display on display
power up	red	off/on	when the receiver is power on, after the power up phase	the PLL is not locked on the select frequency, wait for lock (about 1second or less)
Tuning phase	red	off/on	when the receiver is power on, during a frequency change phase (see Gr-Ch or Frequency menu)	the PLL is not locked on the select frequency, wait for lock
	fixed green	off	after the tuning phase, no transmitter is received	the receiver is locked on the select frequency, the batteries charge is good, no transmitter is synchronized with the receiver, no output audio available
	fixed green	blue	after the tuning phase, a stereo signal is received	the transmitter is correctly tuned, the bars in the status display show the RF levels received from antenna A and B
	fixed green	green	after the tuning phase, a mono signal is received	the transmitter is correctly tuned, the bars in the status display show the RF levels received from antenna A and B, in the status display M symbol appears upper the battery level
	fixed green	on/off	the batteries charge of the receiver is good (>25% lifetime)	the batteries charge of the receiver is good
battery status	slow blinking green	on/off	the batteries charge of the receiver is low (<25% lifetime)	change or put on charge the batteries as soon as possible
batter	fast blinking green	on/off	the batteries charge of the receiver is very low (<12% lifetime)	change or put on charge the batteries immediately
	red	off	battery error	change the batteries
charging status	blinking blue	off	during batteries charging	the batteries are charging (<90% of complete charge)
	blinking green	off	during batteries charging	the batteries are charging (≥90% of charge reached)
char	fixed green	off	during batteries charging	charge complete
	white	green/ blue	device in bootloader mode*	

^{*} to put the MPR30-IEM in boot mode: power on the device push and keep both UP and DOWN buttons for few seconds (until the led indicators light up, then release the buttons)

PUTTING THE DIVERSITY RECEIVER INTO OPERATION

- Insert the batteries
- Connect the headphones
- Connect the 2 antennas on the SMA connectors
- Turn the knob control clockwise until it clicks and verify on the display the Antenna model to use (if the connected antennas on the receiver is different from the antenna model indicate on the display, power off the receiver and replace them with the proper model of antennas)
- after the power up phase, the <u>Status display</u> is showed on the OLED display
- verify the setting and eventually adjust the settings using the Operating Menu

Status display



- Receiver Name (ex. MPR30-IEM RX)
- Group (ex. Gr:00) and Channel (ex. Ch:01)
- Frequency (ex. Fr:697.000 MHz)
- Squelch (ex. Sq:12dBuV)
- Mode Stereo/Mix (ex. Stereo)
- A RF Level Antenna A and B (range 5 ÷ 70 dBμV)
 An orizzontal sign in a central row shows the setted Squelch level
- B. deviation level (range of 54 dB, bar with 3dB steps; upper level= 0dB, under level=-54dB) the upper symbol:
 - indicates presence of audio output
 - S indicates absence of audio output (RF level < Squelch)
 - indicate absence of audio output (no pilot tone detected)

NOTE: in case of absence of pilot tone and RF level < Squelch, the symbol will be display

- batteries level for MPR30-IEM receiver the upper symbol:
 - M indicates receiving of a mono signal
 - S indicates receiving of a stereo signal

OPERATING MENU



From Status Display push **SEL** and **EXIT** together to enter on the Main menu

Use **UP/DOWN** to navigate on all available menus Push **SEL** to select a menu item

Use $\ensuremath{\mathbf{UP/DOWN}}$ to move on the different parameters of the menu

Push **SEL** to modify the parameter menu
Use **UP/DOWN** to change the parameter value
Keep push **SEL** to save changing
Push **EXIT** to return on the Main Menu
Push **EXIT** to return on the Status display



Audio settings

The <u>Audio settings</u> menu allows to configure the audio output.

PARAMETER	SETTING	MEANING	
	Stereo	The left and right signals are available as usual. The Balance setting serves to adjust the balance between the left and right stereo signal.	
Out mode	Mix	The left-right signals are mixed and are available as a mono signal in both headphone channels. The Mix mode setting serves to adjust the relative levels of the two separate channels in the mixer mono signal.	
Dil Attack	Yes	When the Pilot tone is enabled, the audio output is muted unless the correct carrier is detected. Pilot tone allows working with lower RF squelch, increasing the coverage and the robustness especially in presence of digital television carriers (DVB-T).	
Pilot tone	No For the present	When the Pilot tone is disable, the audio output is muted if RF level < Squelch level re/absence of audio output, check the upper symbol in the	
	status display	eyabsence of audio output, check the upper symbol in the	
Balance	When Out mode set to Stereo	This menu allows to adjust the balance between the left and right stereo signal in 35 steps. Push UP/DOWN button to change the balance.	
Mix Mode	When Out mode set to Mix	This menu allows to adjust the relative levels of the two separate channels in the mixer mono signal in 35 steps. Push UP/DOWN button to change the level.	
Pwr limit	OFF 32Ω100mW 32Ω50mW 32Ω30mW 16Ω100mW 16Ω50mW	This menu allows to limit the power output. Set the proper impedance@power according to the earphones used. NOTE: if set to OFF, there is no power limit control.	
Vol. boost	0/3/6/9/12dB	This menu allows to increase the volume of the output headphones, selectable in 3 dB steps from 0 dB to 12 dB. Set the appropriate volume boost and then adjust the volume with the control knob.	
Equalizer	-12dB/+12dB	This menu allows to equalizer Low and High frequencies of the audio (2dB steps from -12dB to 12dB) 1. Push UP/DOWN button to increase/decrease the gain of the Low frequencies (50Hz) 2. Push SEL button to shift on High frequencies, 3. Push UP/DOWN button to increase/decrease the gain of the High frequencies (10kHz) 4. Keep push SEL button to SAVE	

Edit RX
The <u>Edit RX</u> menu allows to configure the radio frequency settings.

PARAMETER	SETTING	MEANING		
	0÷39 groups	Select current group and channel. Group name and		
Gr-Ch	0÷59 channels	channel frequency are displayed on the right.		
	470÷700 MHz			
Frequency	for MPR30-IEM-N	,		
	566÷798 MHz	,		
	for MPR30-IEM-M			
	OFF or	This menu allows to disable the RF squelch or to setup		
Caualah	0/3/6/9/12/	the desired squelch level in dBuV (note 0 dBuV is equal		
Squelch	15/18/21/	to -107 dBm).		
	24/28/32/			
	36/40/46dBuV			
	This function can be o	called also using the dedicated DOWN&SEL buttons		
Scan	pushed together. It al	lows making a scan over a desired frequency group.		
Scan	MPR30-IEM manages	/IPR30-IEM manages up to 2400 custom frequencies organized in 40 groups		
		This extreme flexibility makes the scan function very		
	flexible.			
Select group for scan GR: 00 GROUP. Switch OFF all tx before start! Then it prompts to turn off all transmitters.				
		Scan running: GR: 00 Then finally start the scan!		
CH: 18 566,000 MHz				
After few seconds, scan results are displayed on a chart. Pushing simultaneously UP and DOWN button, the results can be also displayed sorted by level, making easier to pick up the best one.				

(*)As per Wisycom standard, **group 00** and **group 01 or 09** are special; respectively the "center frequency" (474,482/... MHz) and the intergap frequency (i.e. 470/478/486/... MHz). A scan on group 00 will reveal in few seconds the overall DVB-T occupation on the area, while a scan on group 01 will give possible working frequency, usable also in presence of strong DVB-T signal (sort to speak working in the band-guard of 2 digital television channels).

Arrow mode

This menu allows to set the quick menu. The quick menu is displayed pushing UP or DOWN button when the receiver is on the Status display.

Bal/Mix	enters directly to		
	Audio settings>Balance/Mix mode menu (according to the Out mode configured).		
CH	enters directly to		
	1) Edit RX>Gr-Ch menu, to change channel		
	or		
	 Audio settings>Balance/Mix mode menu (according to the Out mode configured). 		
	Push SEL button to change the quick menu between the 2 menus.		
	NOTE: the receiver remember the last quick menu used, therefore when the user		
	enter again on the quick menu, it enters directly to the latest quick menu used.		

Display

This menu allows to configure display setting

PARAMETER	SETTING	MEANING	
LED	Full Alarm OFF	3 LED setting are available: Full: LED indicators works normally Alarm: LED indicators lights up only when an alarm happened OFF: LED indicators remain off	
Contrast	0÷5 Change contrast display from 0 (min) to 5 (max).		
Low timeout (sec)	5÷60 (5sec. steps)	Low timeout sets the timeout from 5 to 60 seconds (5sec steps) to decrease the brightness display.	
Off timeout (sec)	10÷120 (10sec. steps) / OFF	Off timeout sets the timeout from 10 to 120 seconds in 10 sec. steps to turn off the display. With OFF setting the display never turns off.	

Infrared menu

By this menu, MPR30-IEM can be connected to IRDA for setup or firmware upgrades. When the Infrared interface is active, the following screen is displayed.

IR IF active...

NOTE: while in this menu display is not automatically turned off.

Sync menu

The SYNC function is useful to tune a transmitter on the same frequency of the receiver via the IR interface. Before starting the sync function tune the receiver on desired channel, manually or using the SCAN utility. After this, enable the IR interface on the transmitter. Now press UP&EXIT buttons together or



enter in the Sync menu to start the SYNC function. Keep the IR window of the transmitter in front of the IR window of the receiver and, as soon as the connection is done, the receiver will send to the transmitter all the information needed.

If the operation is not possible, (i.e. the frequency range of the transmitter is not compatible with the frequency of the receiver), the display will show an error message. If the transmitter has the function "NAME" enabled, when the sync function is completed it will show the same name of the synchronized receiver.

Name menu



The name menu allows to change the name of the receiver (12 case-sensitive alphanumeric characters). This is the name displayed in the top of the Status display and it is the name sent to the transmitter with the sync function (for the transmitter with this advanced capability).

Use the UP/DOWN buttons to change the selected

character and push SEL button to switch to the next character.

Info menu

the INFO function shows many important features or information of MPR30-IEM receiver:

PARAMETER	example	MEANING	
Model	MPR30- IEM	Wisycom receiver model	
Range	470-700	Frequencies range of working	
FW	v0.2	Firmware version*	
HW	V1	Hardware version	
Serial	Q125635	Serial number	
Option	N	MPR30 Options N= freq. range 470÷ 700 MHz, M= freq. range 566÷ 798 MHz	
Battery	3.70 Volt	Batteries voltage	
BL	V0.4d	Bootloader version	
Арр	V0.77d	Application version	
Errors	4	Number of errors. If the number of errors is > 0 push SEL button to enter on the Errors list. For each error a brief description and the error code is showed. For more information, please see the Error List section.	

^{*} The FW (Firmware version) recaps BL (Bootloader Version) and App (Application version).

Preset menu

This menu allows to load/save 3 user presets or load the Factory configuration.

PARAMETER SETTING		MEANING	
Restore	1/2/3/Factory	Select the Restore submenu and chose the presets to load: user presets (1 or 2 or 3) or Factory preset. Push	
		and keep SEL button to load the preset.	
Save 1/2/3		Select the Save submenu and chose the user presets to save (1 or 2 or 3). Push and keep SEL button to save the preset	

ERROR LIST

When an error occurs, the receiver

A. shows a message on the display

and for some error types

- B. increases the errors counter in the info menu
- C. inserts the error type and code on the error list in the info menu

When the error is solved, the message on the display disappear, but the error information (code and description) are available on the error list in the Info menu (only for some error, see the below table).

NOTE₁: When the receiver is reset the error information (code and error type on the list) are lost, with the exception of errors codes 87/88/89/8A.

NOTE₂: To reset the error counter and the errors list, it is necessary to contact Wisycom.

Errors	Message on display (A)	Error type (C)	Code (C)
HW init failed	HW init failed		
Battery Low	Battery Low		
Battery charge failed	Battery charge failed		
I2C communication error	I2C communication error	I2C access failed	04
Device ID copy1 invalid Memory recovered	Device ID copy1 invalid Memory recovered	Device ID copy 1	87
Device ID copy2 invalid Memory recovered	Device ID copy2 invalid Memory recovered	Device ID copy 2	88
RF copy1 invalid Memory recovered	RF copy1 invalid Memory recovered	RF mem copy 1	89
RF copy2 invalid Memory recovered	RF copy2 invalid Memory recovered	RF mem copy 2	8A
PLL unlocked	-	PLL unlocked	84
CH mem header	-	CH mem header	85
Param mem header	-	Param mem header	86

TROUBLESHOOTING

Problem	Possible cause	Possible solution
"HW init failed" message appears on the display	Error during the hardware initialization phase	-reset the receiver, if the problem persists send to repair at Wisycom Repair Centre
"Battery Low" message appears on the display	Low level on the battery	- change batteries or - recharge the batteries
"Battery charge failed" message appears on the display	Error during batteries charger (damage batteries or wrong batteries)	- change batteries
"I2C communication error" message appears on the display	Communication error on bus I2C	- send to repair at Wisycom Repair Centre
"Device ID copy1 invalid Memory recovered" message appears on the display	Error during the initialization phase. The CRC-16 check of device data (copy 1) detects error.	- nothing (the receiver automatically replace the corrupt copy1 with copy2)
"Device ID copy2 invalid Memory recovered" message appears on the display	Error during the initialization phase. The CRC-16 check of device data (copy 2) detects error.	- nothing (the receiver automatically replace the corrupt copy2 with copy1)
"RF copy1 invalid Memory recovered" message appears on the display	Error during the initialization phase. The CRC-16 check of RF data (copy 1) detects error.	- nothing (the receiver automatically replace the corrupt copy1 with copy2)
"RF copy2 invalid Memory recovered" message appears on the display	Error during the initialization phase. The CRC-16 check of RF data (copy 2) detects error.	- nothing (the receiver automatically replace the corrupt copy2 with copy1)
The Serial Number of the receiver in the Info menu is UNCAL	Error during the initialization phase. The CRC-16 check of device data (copy 1 and copy 2) detects error.	- send to repair at Wisycom Repair Centre
The errors 87 (Device ID copy 1) and 88 (Device ID copy 2) appear in the errors list	Error during the initialization phase. The CRC-16 check of device data (copy 1 and copy 2) detects error.	- If the Serial Number in the Info menu is UNCAL, then send to repair at Wisycom Repair Centre - If the Serial Number in the Info menu is not UNCAL, continue to use the receiver
The errors 89 (RF mem. copy 1) and 8A (RF meme. copy 2) appear in the errors list	Error during the initialization phase. The CRC-16 check of RF data (copy 1 and copy 2) detects error.	- contact Wisycom for more information
The receiver is not able to tuned on the selected frequency and the ON led indicator remains red	Error during frequency tuning	- try to change the frequency, if the problem persists send to repair at Wisycom Repair Centre

The frequencies of all the channels and groups is equal to the lower frequency of the receiver (according to the receiver 470 MHz for MPR30-IEM-N 566 MHz for MPR30-IEM-M)	Error in the channel memory during the initialization phase.	if the error code 85 appears on the errors list: - load a new frequency file (wdf) in the frequency memory of the receiver and - contact Wisycom for more information
Configuration mismatch	Error in the parameter memory	if the error code 86 appears on the error list: - load a preset configuration using Preset menu and - contact Wisycom for more information

If a problem not listed in the above table occurs or if the problem cannot solved with the proposed troubleshooting, please contact support service at support@wisycom.com or sales@wisycom.com.

ACCESSORIES AND PARTS

AWNL30

For MPR30-IEM-N

Band 470 ÷ 574 MHz

Antenna Code label 520

AWNH30

For MPR30-IEM-N

Band 574 ÷ 700 MHz

Antenna Code label 634

AWML30

For MPR30-IEM-M

Band 566 ÷ 654 MHz

Antenna Code label 590

AWMH30

For MPR30-IEM-M

Band 654 ÷ 798 MHz

Antenna Code label 725

Antenna Code label

MPRBAT

Lithium-ion battery pack

CS-KLIC8000 type

Rating: 3.7Vdc @1600mAh (5.9Wh)

MPRCRG

Battery charger

TECHNICAL SPECIFICATIONS

• Frequency ranges : MPR30-IEM-N option 470÷ 700 MHz

MPR30-IEM-M option 566 ÷ 798 MHz

other ranges are available on request in 470÷952 MHz

• Switchable channels : 40 groups of 60 channels fully user programmable.

• Switching-window : up 232 MHz.

• Frequencies : microprocessor controlled frequency synthesizer circuit,

with 25 kHz minimum step. The frequencies can be easily

PC reprogrammed with the optional UPK 300E Programming Kit.

• Frequency error : < ± 2.5 ppm, in the rated temperature range.

• Temperature range : $-10 \div +55$ °C.

Modulation : FM, (stereo MPX decoding, 19 kHz sync carrier)

• Nominal deviation : ±24 kHz

• "A" / "B" antenna in : with sturdy connectors.

Antenna input imp.
 50 ohm sma type (SWR < 1:2; typ. 1:1.4).
 Sensitivity
 2 μV (6 dBμV), for SND/N > 52 dB; in the whole switching-window [1].

• Co-channel rejection : > 2.5 dB.

Adjacent chan. Sel.
 > 80 dB typical (for channel spacing ≥ 400 kHz).

Spurious rec. Rej. : > 100 dB
 IF image rejection : > 90 dB.
 Intermod. rejection : > 76 dB.

• IIP3 : >+10 dBm typical.

Spurious emissions : <2 nW (typical = 0.1 pW).
 Noise Reduction : ENR (Wisycom Extended-NR)

• AF bandwidth : $30 \text{ Hz} \div 20 \text{ kHz}$.

• Frequency response : ± 0.5 dB in the 30 Hz \div 19 kHz range.

DistortionSND/D ratio0.3 % typical.90 dB typical [1]

• Powering : 2 x IEC-LR6 1.5V size-AA alkaline or rechargeable elements

• Weight : 100 g approx. without batteries

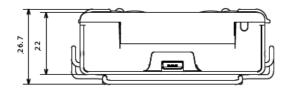
• Headphone-output : Stereo Plug 3.5mm(TRS) Locking (M6 x 0.5 thread) with 2 X 150mW @ 32 Ohm

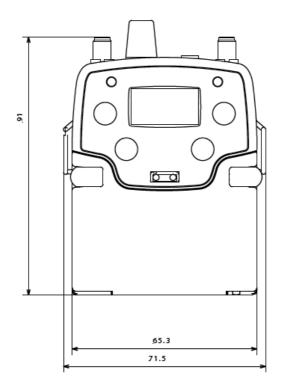
• Battery life : approx.. 5 hours (alkaline batteries), 8 hours (lithium batteries)

NOTE [1]: RMS value, 22 Hz / 22 kHz, unweighted.

The MPR30-IEM receiver complies with ETSI specifications: ETS 300 422.

MECHANICAL DRAWING





Note: unit is mm

DICHIARAZIONE DI CONFORMITA' DECLARATION OF CONFORMITY

Il sottoscritto, rappresentante il seguente costruttore The undersigned, representative of the following manufacturer

WISYCOM S.r.I.

via Spin, 156 - 36060 Romano d'Ezzelino (VI) - Italy

DICHIARA che l'apparecchiatura descritta in appresso:

DECLARES that the product:

Descrizione

Pocket receiver

Description Modello

MPR30-IEM

Model

è conforme alle disposizioni legislative che traspongono le seguenti direttive:

- direttiva 2004/108 CE (Direttiva EMC)
- direttiva 2006/95 CE (Direttiva Bassa Tensione)
- direttiva 99/5 CEE (Direttiva Apparecchiature Radio)

is in accordance with the following Directives:

- 2004/108 EC Directive (EMC Directive)
- 2006/95 EC Directive (Low Voltage Directive)
- 99/5 EEC (Radio Equipment Directive)

e che sono state applicate tutte le norme e/o specifiche tecniche di seguito indicate and that all the following standards have been applied

EN 60065:2002 + A1:2006 + A11:2008 + A2:2010 + A12:2011

EN 301 489-1 V1.9.2

EN 301 489-9 V1.4.1

EN 300 422-2 V1.3.1

Luogo

Romano D'Ezzelino

Place

30 April 2013

Data

Date Firma

Franco Maestrelli

Sign (nome e funzione) WISYCOM s.r.l.

(seese and title)

Franco Maestrelli Amministratore Mnice cauco Mogha

mpr30iem-ce declaration.doc

ITALY ONLY

Obblighi di informazione agli utilizzatori

Modello di informazioni agli utenti dei prodotti di tipo "professionale"

INFORMAZIONE AGLI UTENTI

ai sensi dell'art. 13 del Decreto Legislativo 25 luglio 2005, n. 151 "Attuazione delle Direttive 2002/95/CE, 2002/96/CE e 2003/108/CE, relative alla riduzione dell'uso di sostanze pericolose nelle apparecchiature elettriche ed elettroniche, nonché allo smaltimento dei rifiuti"



Il simbolo del cassonetto barrato riportato sull'apparecchiatura o sulla sua confezione indica che il prodotto alla fine della propria vita utile deve essere raccolto separatamente dagli altri rifiuti.

La raccolta differenziata della presente apparecchiatura giunta a fine vita e' organizzata e gestita dal produttore. L'utente che vorrà disfarsi della presente apparecchiatura dovrà quindi contattare il produttore e seguire il sistema che questo ha adottato per consentire la raccolta separata dell'apparecchiatura giunta a fine vita.

L'adeguata raccolta differenziata per l'avvio successivo

dell'apparecchiatura dismessa al riciclaggio, al trattamento e allo smaltimento ambientalmente compatibile contribuisce ad evitare possibili effetti negativi sull'ambiente e sulla salute e favorisce il reimpiego e/o riciclo dei materiali di cui è composta l'apparecchiatura.

Lo smaltimento abusivo del prodotto da parte del detentore comporta l'applicazione delle sanzioni amministrative previste dalla normativa vigente.

